



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D5237-5**Job Sheet 189695****Part No:** D5237-5**Job Qty:** 8 pcs**Part Name:** Bracket**Part Weight:** 0 lbs**Status:** New**Priority:** Medium**Job Created:** 1/29/19**Job Tracking No:****Due Date:** 2/22/19**Created By:** Jesse White**Type:** Stock**Description:** SIOP**Note:** DWG REV B IPP Rev: A RQ 15.01.15. Verified by: DD**Ship Via:****Bill of Materials****Job Routing**

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Bandsaw - 1	8 pcs		2/22/19	0.00	0.10	Bandsaw - 1		19-05-23
105	HAAS 5 Axis - B4B	8 pcs		2/22/19	0.00	10.83	HAAS - 5 - B4B		19-05-28
110	QC 2	8 pcs		2/22/19	0.00	0.00	QC 2 - 1		
							QC 2 - 12		
							QC 2 - 14		
							QC 2 - 17		
							QC 2 - 19		
							QC 2 - 2		
							QC 2 - 20		19-05-28
							QC 2 - 22		
							QC 2 - 23		
							QC 2 - 25		
							QC 2 - 32		
							QC 2 - 33		
							QC 2 - 35		
							QC 2 - 38		
							QC 2 - 39		
							QC 2 - 4		
							QC 2 - 40		
							QC 2 - 44		
							QC 2 - 45		
							QC 2 - 48		
							QC 2 - 49		
							QC 2 - 50		
							QC 2 - 51		
							QC 2 - 52		
							QC 2 - 54		
							QC 2 - 56		
							QC 2 - 57		
							QC 2 - 62		

**Container No:** S183334**Part:** D5237 - 5**Job No:** 189695**Serial No/Batch:** S183334**Revision:****Spector:****Exp Date:****Instructions:** Various STC's

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 05/23/19

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Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐ ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled		FAULT CATEGORY ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					

120	QC 8	8 pcs	2/22/19	0.00 0.00	QC 2 - 63	
					QC 2 - 8	
					QC 8 - 12	JUN 19/05/31
					QC 8 - 14	
					QC 8 - 17	
					QC 8 - 20	
					QC 8 - 25	
					QC 8 - 3	
					QC 8 - 32	
					QC 8 - 33	
					QC 8 - 35	
					QC 8 - 38	
					QC 8 - 39	
					QC 8 - 4	
					QC 8 - 44	
					QC 8 - 45	
					QC 8 - 49	
					QC 8 - 58	
					QC 8 - 8	
					QC 8 - 9	
					QC 8 - 68	
					QC 8 - 67	
					QC 8 - 1 (A)	
130	Handfinish - 1-1 Chemical-B4B	8 pcs	2/22/19	0.00 0.53	Handfinish - 1 - 1 - B4B	JUN 04 2019
					Handfinish - 1 - 2 - B4B	
					Handfinish - 1 - 3 - B4B	
					Handfinish - 1 - 4 - B4B	
					Handfinish - 1 - 5 - B4B	
					Handfinish - 1 - 6 - B4B	
					Handfinish - 1 - 7 - B4B	
					Handfinish - 1 - 8 - B4B	
					Handfinish - 1 - 9 - B4B	
					Handfinish - 1 - 10 - B4B	
					Handfinish - 1 - 11 - B4B	
					Handfinish - 1 - 12 - B4B	
					Handfinish - 1 - 13 - B4B	
					Handfinish - 1 - 14 - B4B	
					Handfinish - 1 - 15 - B4B	
					Handfinish - 1 - 16 - B4B	
					Handfinish - 1 - 17 - B4B	
					Handfinish - 1 - 18 - B4B	
					Handfinish - 1 - 19 - B4B	
					Handfinish - 1 - 20 - B4B	
					Handfinish - 1 - 21 - B4B	
					Handfinish - 1 - 22 - B4B	
140	QC 7	8 pcs	2/22/19	0.00 0.00	QC 7 - 10	
					QC 7 - 13	
					QC 7 - 14	

Entered: _____ Date: _____



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Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date : _____	Sequence #: _____	QTY Affected : _____		MRB (QSI042)	
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				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Presservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details: _____					

					QC 7 - 15	
					QC 7 - 17	
					QC 7 - 18	
					QC 7 - 19	
					QC 7 - 2	
					QC 7 - 28	
					QC 7 - 3	
					QC 7 - 30	
					QC 7 - 34	
					QC 7 - 36	
					QC 7 - 37	
					QC 7 - 38	
					QC 7 - 41	
					QC 7 - 47	
					QC 7 - 48	
					QC 7 - 51	
					QC 7 - 58	
					QC 7 - 59	
					QC 7 - 6	
					QC 7 - 60	
					QC 7 - 9	
					QC 7 - 68	
					QC 7 - 50	
					QC 7 - 67	
170	Packaging 3-1 - Stock - B4B	8 pcs	2/22/19	0.00 0.00	Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	
					Packaging 3 - 6 - B4B	
					Packaging 3 - 7 - B4B	
					Packaging 3 - 8 - B4B	
					Packaging 3 - 9 - B4B	
					Packaging 3 - 10 - B4B	
					Packaging 3 - 11 - B4B	
					Packaging 3 - 12 - B4B	
					Packaging 3 - 13 - B4B	
					Packaging 3 - 14 - B4B	
					Packaging 3 - 15 - B4B	
					Packaging 3 - 16 - B4B	
					Packaging 3 - 17 - B4B	
					Packaging 3 - 18 - B4B	
					Packaging 3 - 19 - B4B	
					Packaging 3 - 20 - B4B	
					Packaging 3 - 21 - B4B	
					Packaging 3 - 22 - B4B	
					Packaging 3 - 23 - B4B	
					Packaging 3 - 24 - B4B	
					Packaging 3 - 25 - B4B	
					Packaging 3 - 26 - B4B	
					Packaging 3 - 27 - B4B	
					Packaging 3 - 28 - B4B	
					Packaging 3 - 29 - B4B	
					Packaging 3 - 30 - B4B	
					Packaging 3 - 31 - B4B	
					Packaging 3 - 32 - B4B	
					Packaging 3 - 33 - B4B	
					Packaging 3 - 34 - B4B	
					Packaging 3 - 35 - B4B	

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Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date : _____	Sequence #: _____	QTY Affected : _____		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
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Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details: 04 88-8					

180 QC 21 - SA		8 pcs	2/22/19	0.00 0.00	Packaging 3 - 36 - B4B QC 21 - SA - 21 QC 21 - SA - 70	DAS 21 JUN 06 2019 9-50
Part Op 100 - Bandsaw - cut blank 5.625" long Descriptions: 105 - HAAS CNC vertical machine #5 - 1-MILL as per Dwg 2-Debur 110 - QC2- Inspect parts off machine FAI/FAIB 120 - QC8- Inspect parts - second check 130 - Chemical Conversion Coat per QSI005 4.1 140 - QC7-Inspect Chemical Conversion Coat 170 - Identify as per dwg & Stock Location: 180 - QC21- Final Inspection - Work Order Release						
Job BOM						
Part / Item	Component Name	Quantity	Operation	Container		
M6061T6B2.000X04.500	6061T6 Bar 2.00 X 4.500	3.7440 ft (.468 ea)	100-Bandsaw - 1	5158133		
Job Allocations						
Operation	Component Part	Required	Inventory	Allocated		
100-Bandsaw - 1	M6061T6B2.000X04.500	4	14	0		
Part Specifications						
Specifications could not be found.						

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Date : _____	Sequence #: _____	QTY Affected : _____		MRB (QSI042)	
Description Work Order Deviation			Disposition		
			Completed By		
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Other/Details:					

DART AEROSPACE LTD		Work Order:	
Description: Bracket		Part Number:	D5237-5
Inspection Dwg: D5237 Rev: B		Page 1 of 2	

INSPECTION SHEET

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.201	+0.005/-0.001	.201	✓		SLIO	Verin
0.50	+/-0.030	.4975	✓			
1.500	+/-0.005	1.500	✓			
2.530	+/-0.005	2.530	✓			
1.500	+/-0.005	1.500	✓			
0.88	+/-0.030	.880	✓			
0.10	+/-0.030	.102	✓			
0.460	+0.005/-0.000	.461	✓			
0.650	+0.030/-0.000	.671	✓			
1.15	+/-0.030	1.165	✓			
0.100	+0.000/-0.005	.0985	✓		Depth gauge	
0.44	+/-0.030	.422	✓		"	
0.34	+/-0.030	.334	✓		"	
R0.25	+/-0.030	.250	✓		Rad gauge	
0.66	+/-0.030	.658	✓		SLIO	
0.380	+0.000/-0.002	.380	✓		Height gauge	
2.825	+/-0.005	2.827	✓		"	
Ø0.252	+0.005/-0.000	.253	✓		gauge Pin	
0.25	+/-0.030	.250	✓		Height gauge	
1.41	+/-0.030	1.410	✓		"	
54°	+/-0.5°	54°	✓		Protractor	
0.25	+/-0.030	.252	✓		Height gauge	
R0.15	+/-0.030	.150	✓		Rad gauge	
R0.06	+/-0.030	.060	✓		"	
R0.38	+/-0.030	.380	✓		"	
0.86	+/-0.030	.855	✓		H-G	
126°	+/-0.5°	126°	✓		Protractor	
R0.19	+/-0.030	.190	✓		Rad gauge	
76°	+/-0.5°	76°	✓		Protractor	
3.84	+/-0.030	3.842	✓		H-G	
4.03	+/-0.030	4.027	✓		"	
5.03	+/-0.030	5.030	✓		"	
0.38	+/-0.030	.374	✓		SLIO	
R2.00	+/-0.030	2.000	✓		Rad gauge	
0.38	+/-0.030	.374	✓		SLIO	
3.18	+/-0.030	3.183	✓		"	
R1.00	+/-0.030	1.000	✓		Rad gauge	
3.96	+/-0.030	3.964	✓		SLIO	
87°	+/-0.5°	87°	✓		Protractor	

Entered: _____ Date: _____



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Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					

DART AEROSPACE LTD		Work Order:	
Description: Bracket		Part Number:	D5237-5
Inspection Dwg: D5237	Rev: B	Page 2 of 2	

INSPECTION SHEET

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
R0.25	+/-0.030	.250	✓		Rad gauge	
2.39	+/-0.030	2.390	✓		Height gauge	
Ø0.201	+0.005/-0.001	.201	✓		SLIO	Veru
Ø0.385 x 100°	+/-0.010 x +/-0.5°	.392	✓		"	
0.88	+/-0.030	.880	✓		"	
0.580	+0.010/-0.015	.581	✓		"	
0.325	+0.000/-0.010	.317	✓		"	
0.655	+0.030/-0.000	.663	✓		"	
0.460	+0.005/-0.000	.461	✓		"	

Measured by:	20 9-89	Checked by:	<i>amb</i>	QC Inspector:	
Date:	19-05-23	Date:	19/05/31	Date:	

Engineering Approval: (If necessary)		Date:	
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Rev	Date	Change	Revised by	Approved
A	16.01.20	New Issue	KJ	<i>[Signature]</i>

Entered: _____ Date: _____



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